Embedding innovative assessment practices to develop critical appraisal skills in a third year social science unit

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There is a growing imperative in tertiary education (nationally and internationally) to enable lifelong learning as a graduate outcome (Bologna Process, 2010: Boud & Falchikov, 2006; Oliver, 2011). At ECU our new undergraduate curriculum framework titled *Curriculum 2012: enabling the learning journey* promotes lifelong learning and assessment for learning. Lifelong learning implies developing both the capacity to learn and the ability to direct learning. In order to successfully direct their own learning beyond university students need to be able to identify the standard of performance to which they should aspire as a result of that learning, accurately locate where they are in relation to the standard, and then develop pathways to bridge the gap. In other words they need to engage in formative assessment.

This paper reveals how one lecturer introduced innovative practices in teaching and assessment in order to enhance her students' ability to direct their own learning, to increase the value students place on their feedback, to ensure their active engagement with feedback, and ultimately to develop students' ability to calibrate their own judgement about their learning. The innovation was designed to increase student understanding of what constitutes academic rigour within the discipline as well as the standards required for success in real world endeavours.

Keywords: critical appraisal, peer evaluation and feedback, lifelong learning

Background

The pace of change in the 21st century suggests that success in any endeavour will be directly proportional to our ability to learn. This is recognised particularly by employers, who seek graduates with a demonstrated ability to be independent, self-managing, lifelong learners (DEST, 2002). These graduates will also require collaborative skills to work in teams in order to achieve shared goals.

Higher education has undergone significant changes in recent years that reflect this emphasis on self-direction and collaboration. A key aspect of these changes is how assessment is conceptualised as not only measuring learning, but also impacting on learning (Juwah et al., 2004). There has been increasing research around the way assessment drives learning (Black

&Wiliam, 1998; Boud, 1995; Ramsden, 2003). We now know that students tend to channel their energies almost exclusively into what they believe they need to do to achieve high grades. We understand that:

> Every act of assessment gives a message to students about what they should be learning and how they should go about it. The message is coded, is not easily understood and often it is read differently and with different emphases by staff and by students. (Boud, 1995, p. 36).

 If we want to change what students learn, we need to change our assessment practice.

An important attribute of independent, self-managing, lifelong learners is the ability to regulate their own learning. Self regulated learners need to be reflective and to be able to evaluate their learning as it occurs. Engagement in the process of formative assessment offers an opportunity for learners to develop their skills in this area. An important benefit of such engagement is that it improves academic outcomes (Rust, O'Donovan & Price, 2006). In addition, Van Den Berg (2006) observed that active engagement in peer assessment produced better structured interaction between students, as well as more organised written work. By commenting on the work of peers, students develop an understanding of standards which they then transfer to their own work (Nicol & MacFarlane-Dick, 2006).

For students, one method for engaging in the process of formative assessment is through self and peer assessment. Significant learning benefits for students can be derived from understanding the standards against which they will be assessed and also from monitoring their own progress towards these standards (Fontana & Fernandes, 1994; Li, Liu & Stickelberg, 2010).

Black and Wiliam (1998) refer to the substantial evidence from research studies suggesting that classroom assessment will be most effective when learners:

- clearly understand the criteria by which their work will be judged;
- are able to identify both their current level of achievement and the desired level of achievement (the gap);
- are able to obtain information about the gap and about how to close the gap; and
- are able to actually use this information in closing the gap.

While earlier literature stressed the importance of high quality feedback to enhance learning, recent research acknowledges the difference between feedback being given and feedback being *used* by students. Simply being provided with feedback appears insufficient to effect improvement in student performance (Crisp, 2007).

Peer assessment is increasingly being seen as having the potential to improve student learning within the discipline as well as developing a broad range of graduate attributes that will equip students to meet the demands of 21st century workplaces. We are now seeing more and more examples of innovative practices in this area (Bryan & Clegg, 2006) and a scholarship of assessment appears to be emerging, as called for by Price (2005). Price observed that, even when explicit assessment marking criteria were available, the assessment process also required access to markers' unarticulated tacit knowledge about assessment standards. She noted how markers struggle to share this tacit assessment knowledge among themselves. Rust, O'Donovan and Price (2006) saw that engaging fully and collaboratively with the assessment

criteria and required standards of performance encouraged articulation of this tacit assessment knowledge, and transference of knowledge from tutors to students.

Peer assessment can also improve self-assessment, as the act of evaluating the work of others against a standard helps students gain insight into *their own* performance (Liu & Carless, 2006). Yorke (1998) noted that this contributes towards developing students' abilities to make judgements, an important skill for professional life.

Other potential advantages of peer assessment noted by Race (1998) include developing in learners a sense of autonomy and ownership of the learning and assessment process, improving motivation, encouraging student responsibility and accountability for learning, seeing mistakes as part of learning, and encouraging deep rather than surface learning. Laverick (2007) considers such awareness of the process of learning to be critical in students knowing how to learn.

Context

Social Science students in this particular unit are introduced to Bronfenbrenner's ecological theory (Bronfenbrenner, 1979) early in their studies and understanding of this theory is developed over the course. By the time students are in their final year, those involved in CHN3206_4115 are required to apply this theory as they design an effective family support programme.

Further to the students being immersed in the application of this theory, they are also immersed in a learning environment that can be understood through Bronfenbrenner's ecological theory. Students bring to their learning environment their individual characteristics such as readiness to learn, culture and self-efficacy, which impact upon their development as a person (Yih Chyn Kek, Darmawan & Chen, 2007). In addition, students' individual characteristics impact upon the connections they have between various systems (Microsystems) they are involved in. Whilst students are not engaged in primary research, they do need to research and connect with potential workplaces and organisations (other systems). As students develop connections to these systems the ecological theory is evident. The application of the theory continues as students explore the impact of culture, societal attitudes and government policy upon the people they are designing the family support programme for. Awareness of this enhances students understanding of the application of the ecological theory and further develops their skills that will assist them as graduates. Overall, students are immersed in a learning environment that is authentic and clearly links theory to practice.

Consistent with situated learning, the assessment for this unit is contextualised around Bronfenbrenner's ecological theory and this creates uniqueness. Students are required to design a family support programme for a population of their choice. They have the option of basing their learning within their cultural context and area of interest. This is achieved through students contextualising their programme to their circumstances. For example:
- International students who are studying in Australia and will be returning to their country of origin may choose to focus their programme within their home country.
- Off-campus students living within other parts of Australia or overseas may focus their programme in their community.
- On-campus students are not restricted when deciding upon the geographical location of their programme.

By applying the ecological theory to the students learning, encouraging students to introduce their context to the assessment and supporting an international and cross-cultural approach, students will have a quality learning experience.

Drivers for change

Before the introduction of the innovation, the assessment scheme already contained two assignments that were linked. Both were authentic tasks requiring a combination of academic rigour and real world application. The second assignment built on the first, with feedback from the first assignment expected to be responded to and incorporated into the second. With high numbers of students the workload for the lecturer of providing extensive feedback for each student was extremely high and not sustainable. Responsibility for directing the learning required to close the gap between current and desired performance also fell to the lecturer rather than the students. Although marking guides were supplied with tasks, the interpretation of these guides was done by the lecturer while students passively awaited feedback. Therefore students never really developed an understanding of what the various levels of performance actually looked like.

The lecturer also wished to assist her final year students to realise their potential as future leaders. This motivated the lecturer to create a learning experience that would develop their ability to lead others in their practice. To accomplish this, the skills of critical reflection and appraisal are essential and this unit provided an ideal opportunity for students to attend to these skills.

With a desire to address the challenges of high teacher workload in giving high quality feedback, lack of student engagement with feedback, and a desire to promote lifelong learning, collaborative and leadership skills in graduates, it became clear that changes needed to be made to the assessment strategy. To begin this change process Susan contacted Catherine, an academic development consultant in the Centre for Learning and Development, and a productive collaborative relationship began. An initial analysis of the assessments for this unit was followed up with further meetings. Further reflection by both of us, and a willingness to achieve a desired outcome, led to more substantive changes being embarked upon which centered around the implementation of peer review processes.

What learning approach did we adopt?

We both conceive learning as an active process, and note that constructivism (the notion that learners actively construct knowledge) is the dominant approach in Australian classrooms today. Situated learning theory is a particular constructivist approach that emerged in the late 1980s and early 1990s (Brown, Collins and Duguid, 1989; Lave and Wenger, 1991). It builds on other theories such as Bandura's social learning theory (modelling Vygotsky's constructivism), and incorporates a number of principles of adult education, problem-based learning and experiential learning (Drummond, 2010).

Situated learning theory suggests that skills should be acquired through authentic contexts and through communication with peers and experts about and within those contexts (McLoughlin & Luca, 2002). Our assessment approach draws on situated learning theory and fits within a social constructivist paradigm which posits that meaning is negotiated in learning situations. In situated learning approaches, students collaborate with one another, and their instructor, in

moving toward some shared understanding. A core characteristic of situated learning is active participation of students in a real-world or near-real world context for the purpose of learning (Drummond, 2010).

This suggested that a situated learning approach would be a natural fit with Susan's aim of encouraging students to conduct formative assessment in this unit.

The innovation

The lecturer's degree of preparation and ability to facilitate the learning process required for peer feedback was considered essential to the success of the proposed changes. Susan considered a number of factors in the preparation for the changes to this unit. Prior to involvement of students, sufficient time was allowed for adjustments and to effect changes. Susan's openness to change was a vital precondition to embedding the innovation successfully. This openness was demonstrated by her willingness to work collaboratively and consider 'possibilities' suggested by Catherine.

Table 1 (below) illustrates the alignment between our adopted situated learning approach and the eventual implemented practice.

Table 1: Situated learning approach in CHN3206_4115

Situated learning	CHN3206_4115
Authentic contexts reflect the way knowledge will be used in real life	Students design a family support programme to meet a real need in a real situation
Authentic activities reflect future professional activities	Students obtain feedback from others in designing the programme
Access to experts	Research, lecturer input, community input
Modelling of authentic processes	Scaffolded assignments mimic development stages of real programmes
Multiple roles and perspectives in the collaborative construction of knowledge	Students provide feedback to peers and gain the perspective of peers on their work
Promote articulation to enable tacit knowledge to be made explicit	Students discuss required standards of performance and what they might look like
Reflection to enable abstractions to be formed	Written feedback and reflection on feedback in order to respond

With this alignment achieved the students' involvement in the process then became the focus. A timeline was set for the semester to ensure that students had sufficient time to learn about and to reflect on the peer reviewing process. The lecturer explored and read about peer reviewing to increase her knowledge of the process and the benefits of engaging in this within the learning environment. Furthermore, the lecturer continued to consult with Catherine to ensure the quality of the peer reviewing process being introduced.

Table 2: Timeline

Week 1	Details of peer reviewing provided to students.
Week 2	Students engaged to look at the guidelines to be used in the peer reviewing process.
Week 3	Lecturer considers feedback from previous week and adjustments are made to peer reviewing document.
Week 4	Students provided with sample assignments and Peer Reviewing Key. On-campus students undertake a review of these assignments in class. Off-campus students engage in the same process through using Blackboard.
Week 7	Students engage in the peer reviewing process in class and on-line
Week 9 (approximately)	Students are provided with a copy of the review of their work when marked assignments returned.
Week 13	Students submit their final assessment in this week. Students are required to consider the feedback provided by their peer. Whilst they do not have to use this feedback the student must consider it and reflect on the feedback, explaining why used or why they didn't use the feedback.

The experience so far

The learning process for the students began with a collaborative approach to adjust the marking key for the first assessment and to make criteria clear.   With these changes made, this document was fine tuned to be used in the peer reviewing process. To further assist students' understanding, guidelines of the peer reviewing process were developed. With the guidelines developed the lecturer recruited five students (both on and off-campus) to review them.   Comments from the students identified points requiring further clarification. For example, the time frame for the reviewing was not considered clear and the guidelines for the off-campus students required further clarification around the actual process of reviewing. These comments resulted in a revision of the guidelines.

Following this initial stage, in week four the students were introduced to peer reviewing in class and on-line. On-campus students were provided with sample assignments from previous years and the peer reviewing key. To facilitate this process the lecturer explained the process and encouraged the students to first consider the assignments on their own and then to discuss in their groups. Similarly, off-campus students were provided with sample assignments and peer review key and encouraged to go through the same process but to use Discussion Board as the means of discussion with peers. Group discussions enabled students to consider differences and similarities between comments and in relation to their assignment, consider and gaps and what they can do to rectify these prior to the submission of the assessment.

A further aim of the week four reviewing was to gather feedback on the peer review key as it was important that the document was useful and there was a high degree of clarity. Both off and on-campus students were asked to provide comments and they indicated that the document did not require any changes.

With this task completed the next task is to undertake the actual peer review session. This session will be conducted in week seven and on-campus students will provide a copy of their assignment for reviewing. Students will receive another student's assignment and the finalised peer reviewing key and have 40 minutes in which to review the document. Once completed, students will be pairing with the students whose assignment they have reviewed and at this stage they will provide verbal feedback. To ensure that all students have the opportunity to give and to receive feedback this will be undertaken twice.

The final stage of this assessment requires students to reflect on the feedback they receive from their peer. The second assignment builds on the first one, therefore having this opportunity to receive additional feedback and respond to it, enables students to improve their performance.

This paper was written in week five of semester two and therefore the peer reviewing session is still two weeks away. It is anticipated that the results of this session will be provided as an anecdote to this paper.

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